US00D793400S

(12) **United States Design Patent**
Lin et al.

(10) **Patent No.: US D793,400 S**
(45) **Date of Patent: ** Aug. 1, 2017**

(54) **HEAT SINK FOR MEMORY MODULE**

(71) Applicant: **KINGSTON DIGITAL, INC.**, Fountain Valley, CA (US)

(72) Inventors: **Yi-Ting Lin**, Hsinchu (TW); **Yu-kuo Huang**, Hsinchu (TW); **Peter Leekuo Chou**, Fountain Valley, CA (US); **Tsung Shiao Tsai**, New Taipei (TW)

(73) Assignee: **Kingston Digital, Inc.**, Fountain Valley, CA (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/563,885**

(22) Filed: **May 9, 2016**

(51) **LOC (10) Cl.** **14-02**

(52) **U.S. Cl.**
USPC **D14/435**; D14/436; D13/179

(58) **Field of Classification Search**
USPC D14/435, 356, 242, 436, 433, 474, 240, D14/496, 385, 358, 480.1–480.7; 360/97.01, 685, 686, 752, 737, 732, 784, 360/803; 439/345, 346, 377, 135, 144, 439/139–141, 147, 136, 638, 518, 131; 365/51, 63, 131; 710/52, 300, 313; 711/115, 103, 154, 161–162; 70/58; 323/210; 713/186, 1; 382/124; 235/492; D13/179, 147; 165/80.1, 80.2, 80.3, 185; 361/715, 702, 710, 719, 717, 728, 730, 361/741, 709, 720, 704, 700, 752, 753, 361/701, 684, 711, 679.54, 690, 692;
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,738,252 B2 *	6/2010	Schuette	G06F 1/206 165/185
D657,756 S *	4/2012	Mueller	D13/179

(Continued)

Primary Examiner — Susan Moon Lee
(74) *Attorney, Agent, or Firm* — Skaar Ulbrich Macari, P.A.

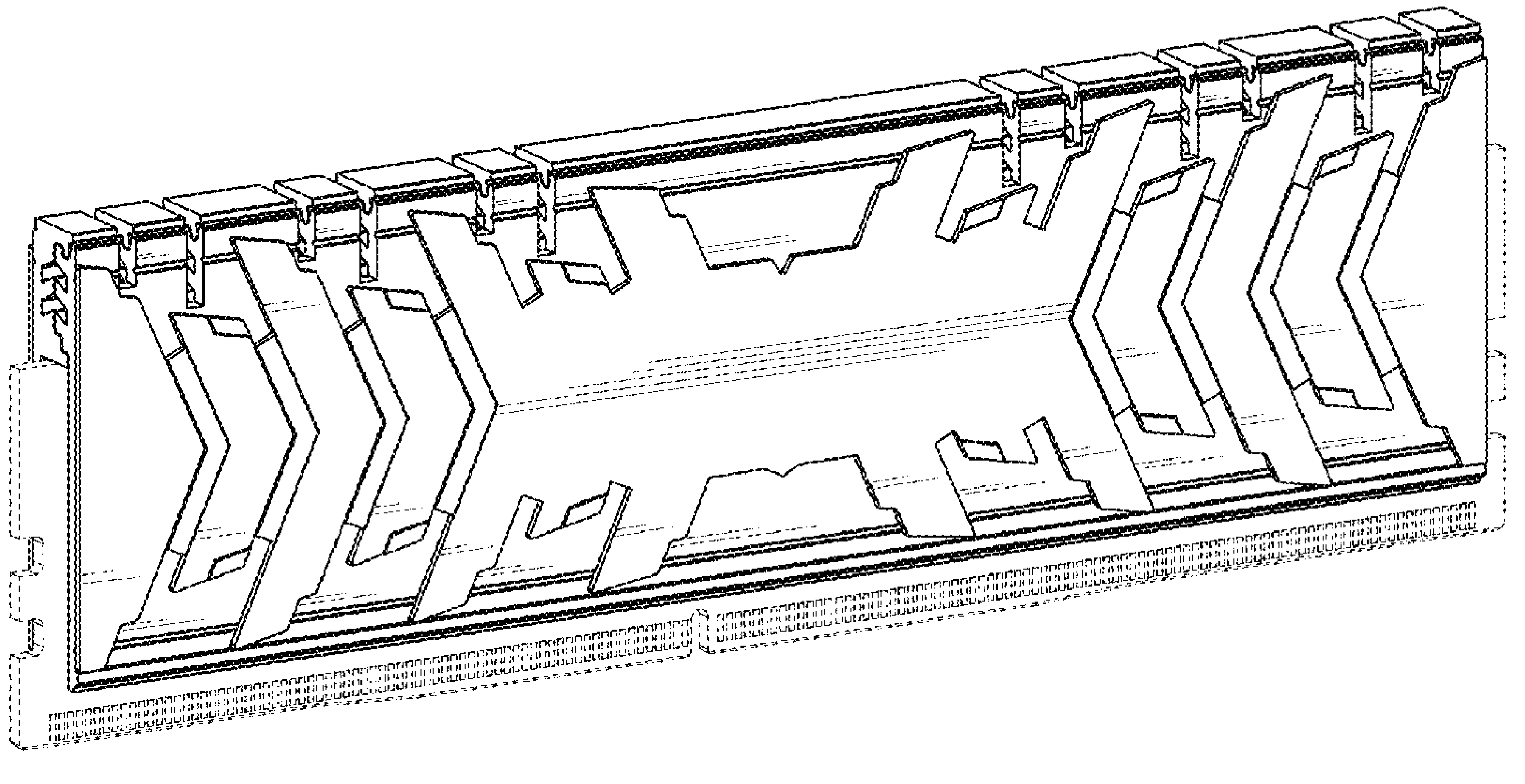
(57) CLAIM

We claim the ornamental design for a heat sink for memory module, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view of a heat sink for memory module showing the claimed design;
FIG. **2** is another perspective view thereof;
FIG. **3** is a front elevational view thereof;
FIG. **4** is a rear elevational view thereof;
FIG. **5** is a left side elevational view thereof;
FIG. **6** is a right side elevational view thereof;
FIG. **7** is a top plan view thereof;
FIG. **8** is a bottom plan view thereof;
FIG. **9** is an enlarged fragment view of the portion of the heat sink for memory module indicated by encircled region "A" of FIG. **2**;
FIG. **10** is an enlarged fragment view of the portion of the heat sink for memory module indicated by encircled region "B" of FIG. **2**;
FIG. **11** is an exemplary perspective view showing the heat sink for memory module in use; and,
FIG. **12** is another exemplary perspective view showing the heat sink for memory module in use.
The broken lines in FIG. **2** are employed merely to indicate which portions of the heat sink are shown in enlargement in FIGS. **9** and **10**, and form no part of the claimed design.
The illustrative broken line showing of a card placed within the heat sink in FIGS. **11** and **12** depicts an exemplary component which might be used with the heat sink for memory module, and forms no part of the claimed design.

1 Claim, 6 Drawing Sheets



(58) **Field of Classification Search**

USPC 257/707, 706, 708, 709, 719, 711–713, 257/715, 718, E23.086, E23.103, 257/E23.088, E23.098, E23.08, 4, 257/E23.102, E23.101, E23.105, E25.023

CPC G06K 19/06196; G06K 19/072; G06K 19/0721–19/0728; G06K 19/073; G06K 19/07309; G06K 19/077; G06K 19/07701; G06K 19/07715; G06K 19/0772; G06K 19/07724; G06K 19/07726; G06K 19/07728; G06K 7/0021; G06K 7/0047; G06F 21/77–21/80; G06F 21/85–21/88; G06F 21/00; G06F 1/20; G06F 1/206; G06F 1/185; G06Q 20/3229; G06Q 20/34; G06Q 20/341; G06Q 20/346; G06Q 20/349; G06Q 20/3563; G06Q 20/3567; G06Q 20/357; G06Q 20/3576; H05K 5/026; H05K 5/0256; H05K 5/0265; H05K 5/0269; H05K 5/0273; H05K 5/0278; H05K 5/0282; H05K 5/0286; H05K 5/0291; H05K 5/0295; H05K 5/03; H05K 5/04; H05K 5/06; H05K 5/061–5/069; H05K 7/00; H05K 7/005; H05K 7/02; H05K 7/023; H05K 7/026; H05K 7/20509; H05K 7/04; H05K 7/10; H05K 7/1418; H05K 7/142; H05K 7/1405; H05K 7/1424; H05K 7/1427–7/1439; H05K 7/1461; H05K 7/1464–7/1474; H05K 7/1479; H05K 7/1481; H05K 7/1485–7/1488; H05K 2201/09745; H05K 2201/09754; H05K 2201/09763; H05K 2201/09772; H05K 2201/098; H05K 2201/09818; H05K 2201/10; H05K 2201/10007; H04N 2201/216; H01R 13/62933; H01R 13/62905; H01R 13/6275; H01R 13/6395; H01R 13/62938; H01R 13/64; H01R 13/645; H01R 13/6456; H01R 13/635; H01R 13/633; H01R 23/7005; H01R 23/682; H01R 23/684; H01R 23/70; H01R 23/7068; H01R 23/7026; H01R 31/065; H01R 27/02; H01R 2103/00; H01R 12/7029; H01R 12/83; G11C 5/04; H01L 23/4093; H01L 23/3672; H01L 23/3675; H01L 23/373; H01L 23/4043; H01L 23/405; H01L 23/4062; H01L 23/427; H01L 23/473; H01L 23/367; H01L 23/4006; H01L 23/552; H01L 2924/00; H01L 2924/0002

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D689,829	S *	9/2013	Chen	....	D13/179
D698,792	S *	2/2014	Lin	....	D14/435
D702,689	S *	4/2014	Lin	....	D14/435
D702,690	S *	4/2014	Lin	....	D14/435
D733,145	S *	6/2015	Chen	....	D14/435
D735,201	S *	7/2015	Lin	....	D14/435
2006/0056154	A1*	3/2006	Foster, Sr.	....	G06F 1/185 361/700
2006/0268523	A1*	11/2006	Lin	....	G06F 1/20 361/710
2008/0101036	A1*	5/2008	Chen	....	H01L 23/4093 361/720
2014/0367077	A1*	12/2014	Wu	....	H01L 23/36 165/185

* cited by examiner

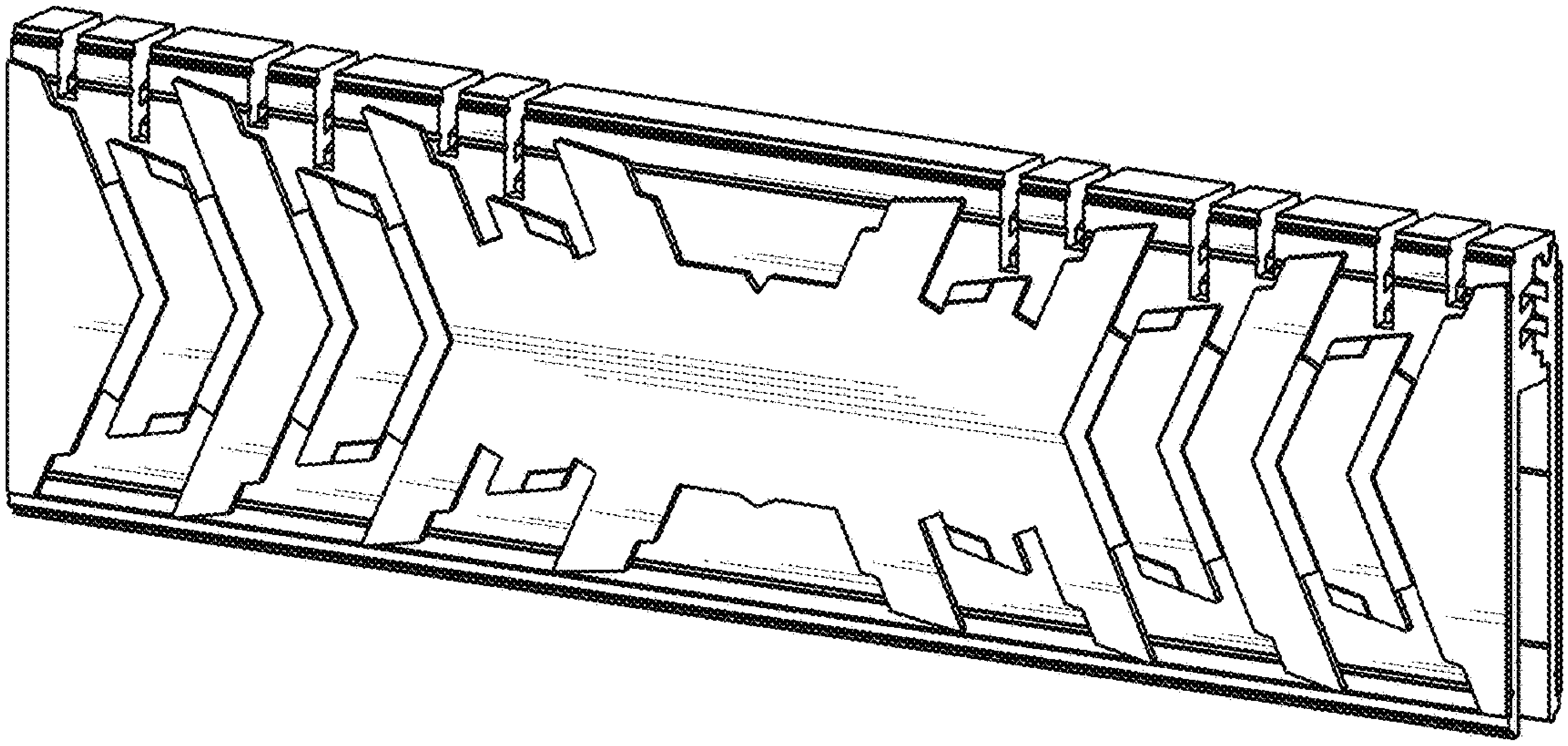


FIG.1

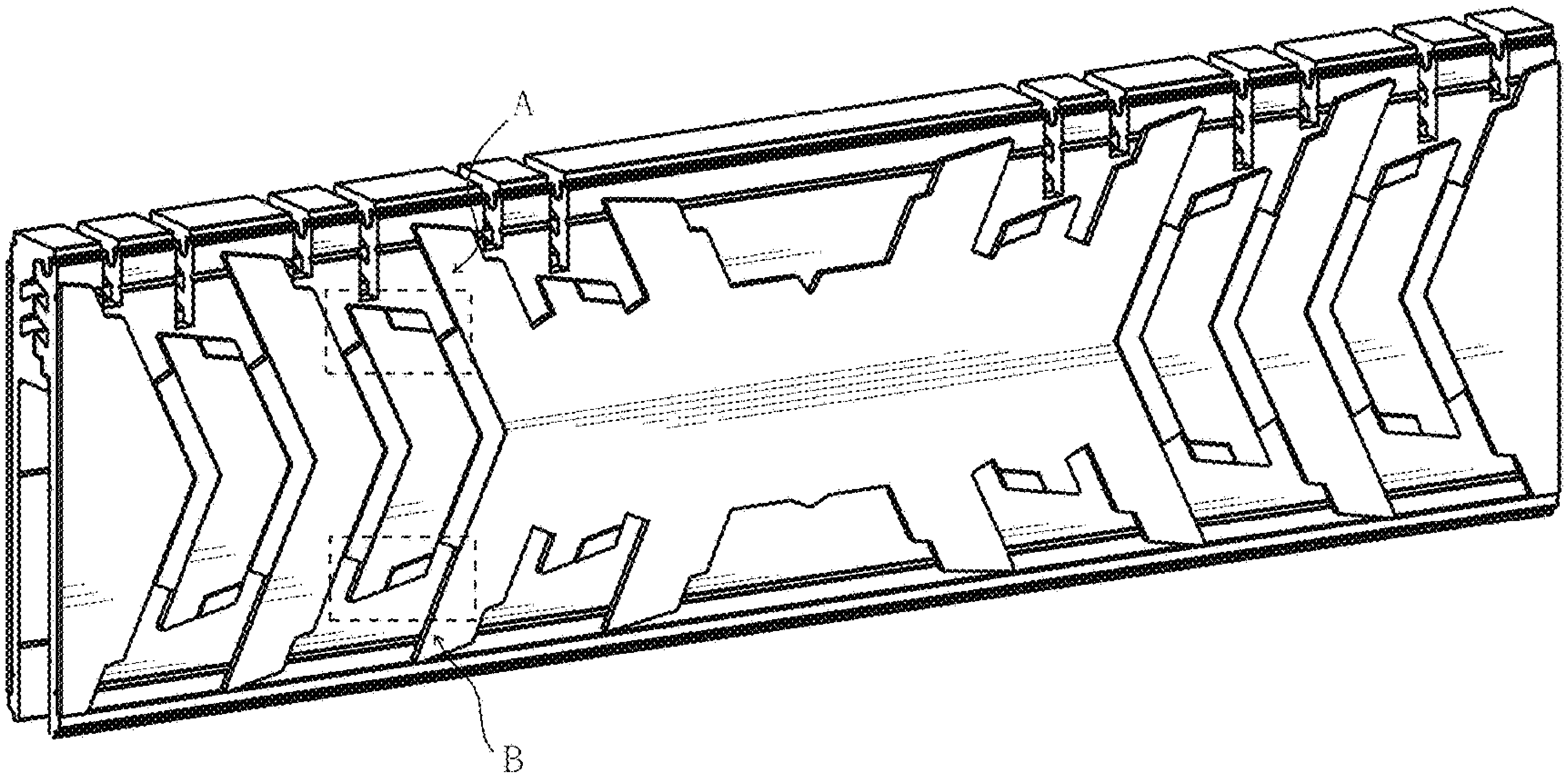


FIG.2

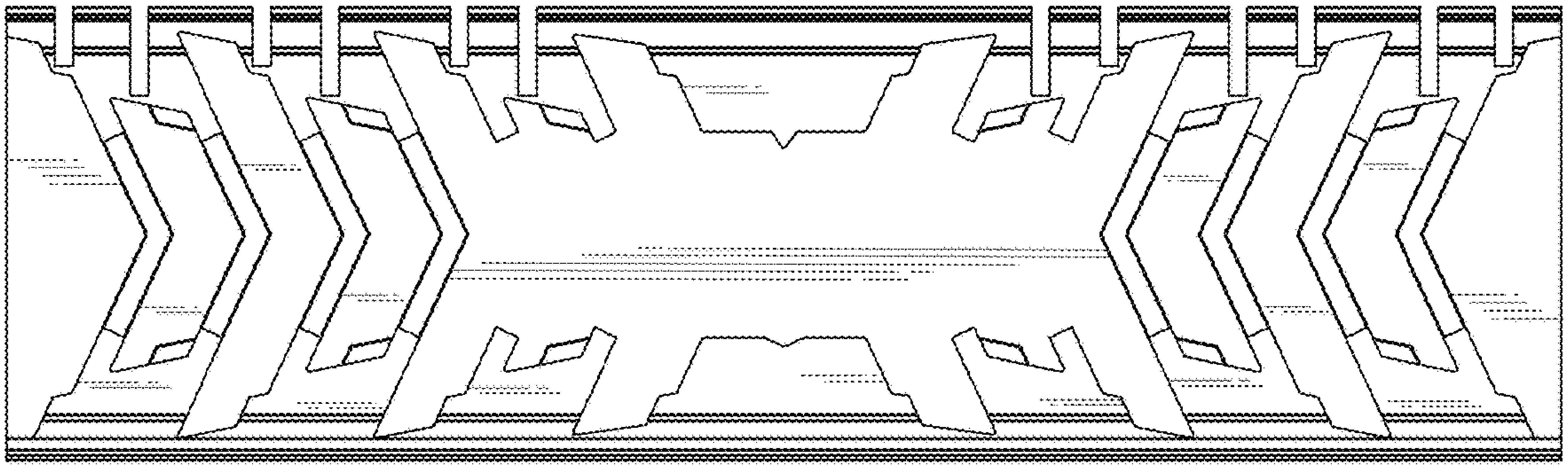


FIG.3

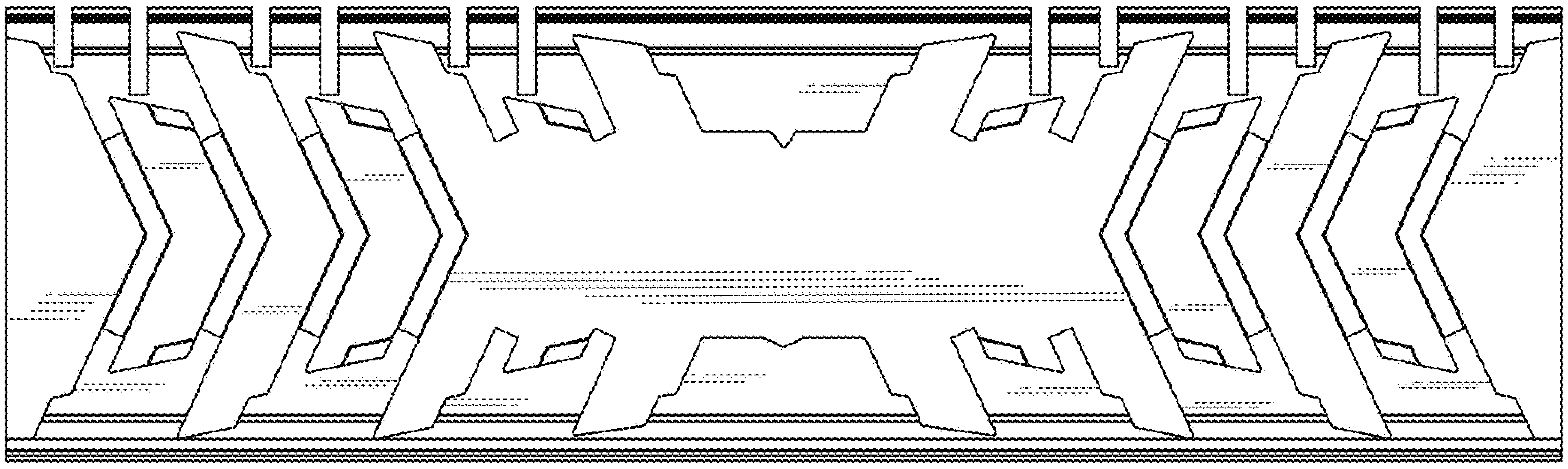


FIG.4

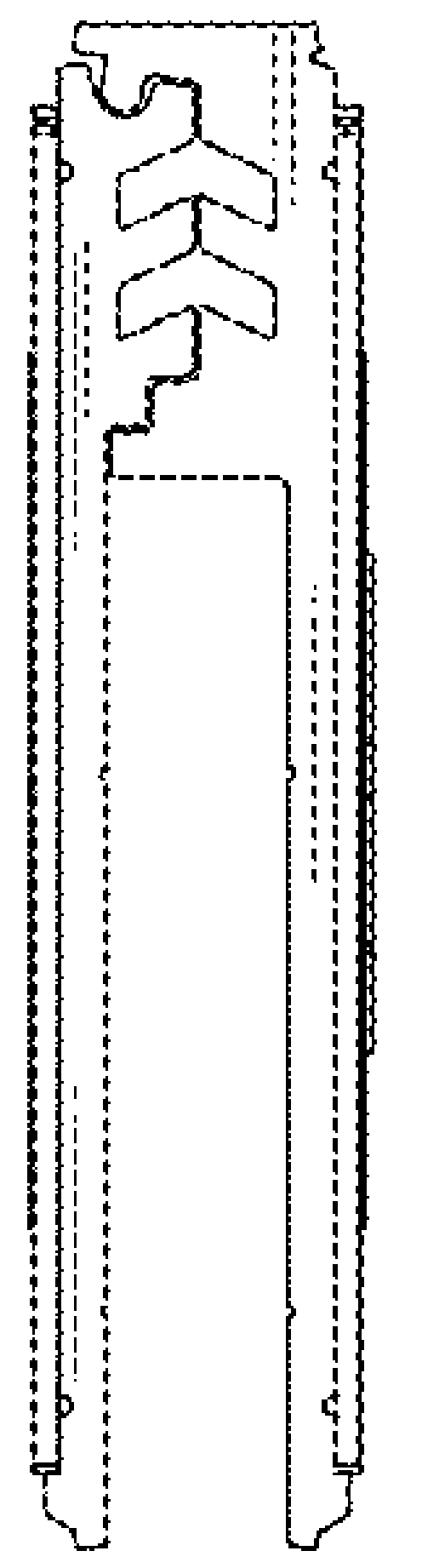


FIG.5

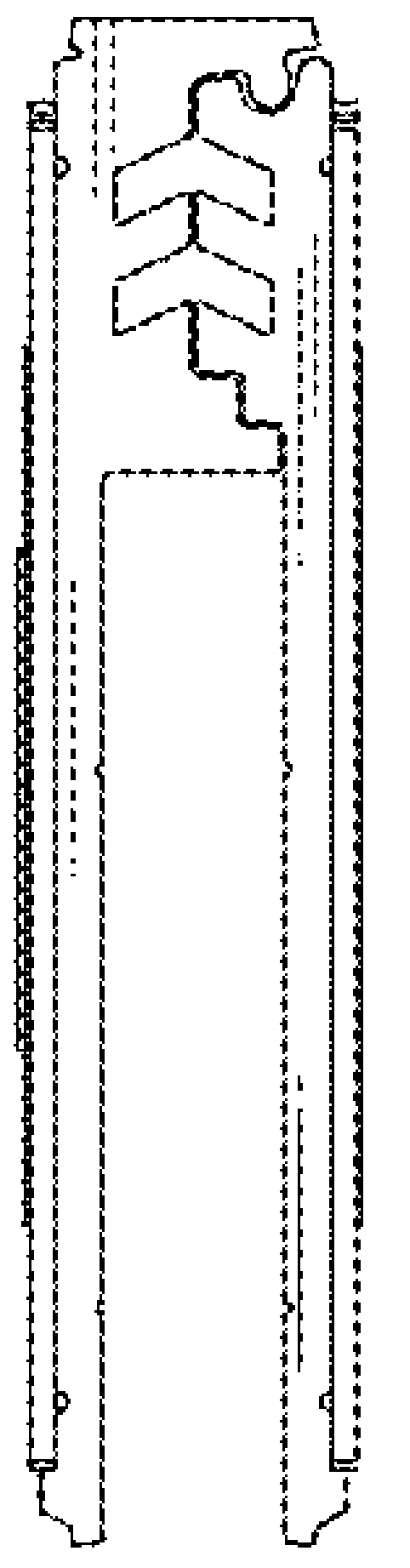


FIG.6

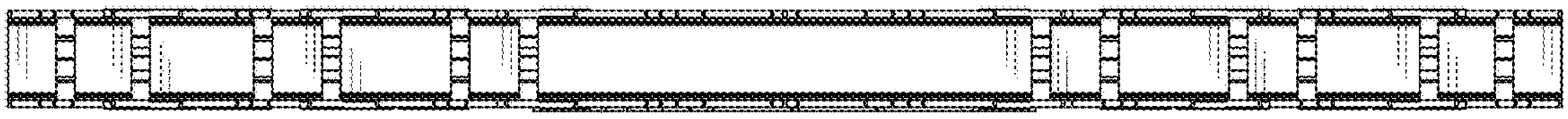


FIG.7

FIG.8

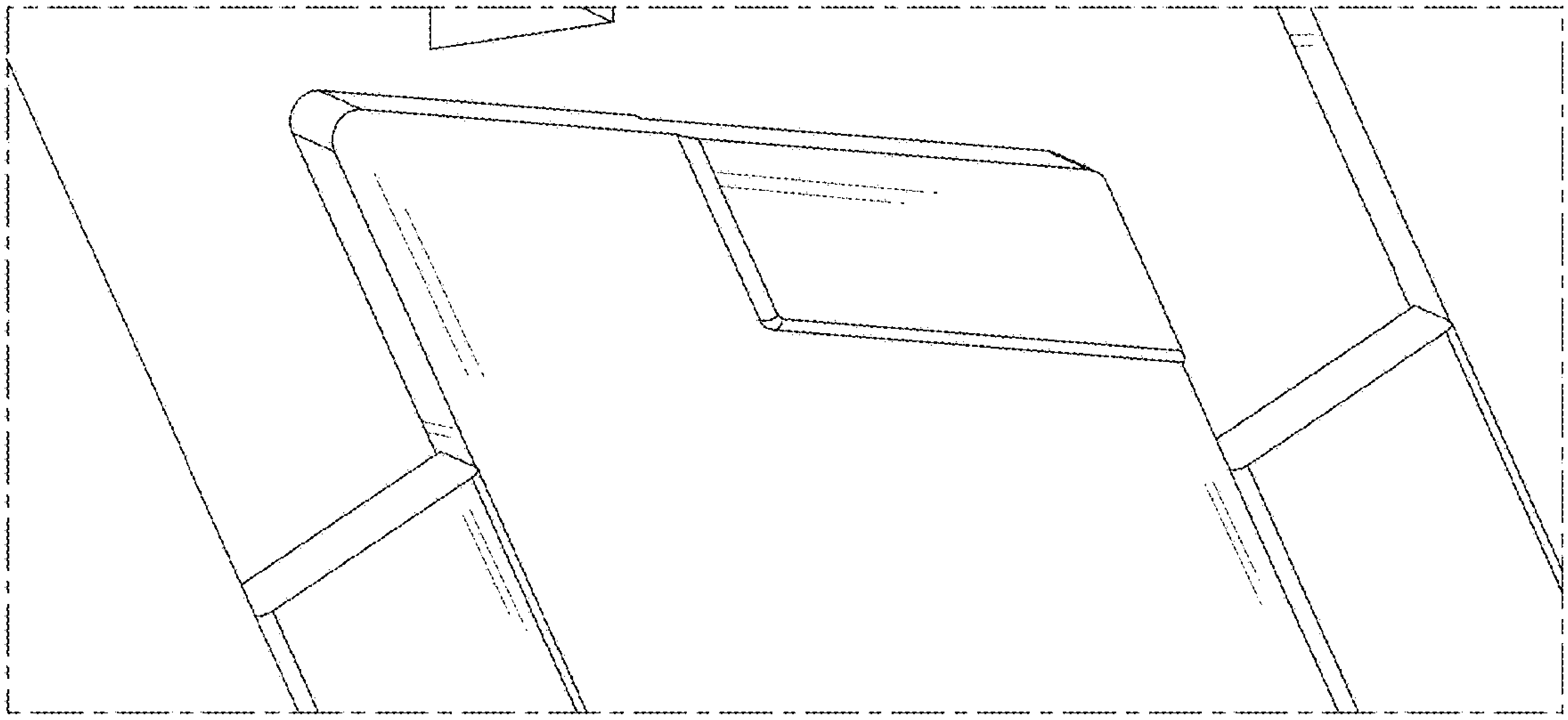


FIG.9

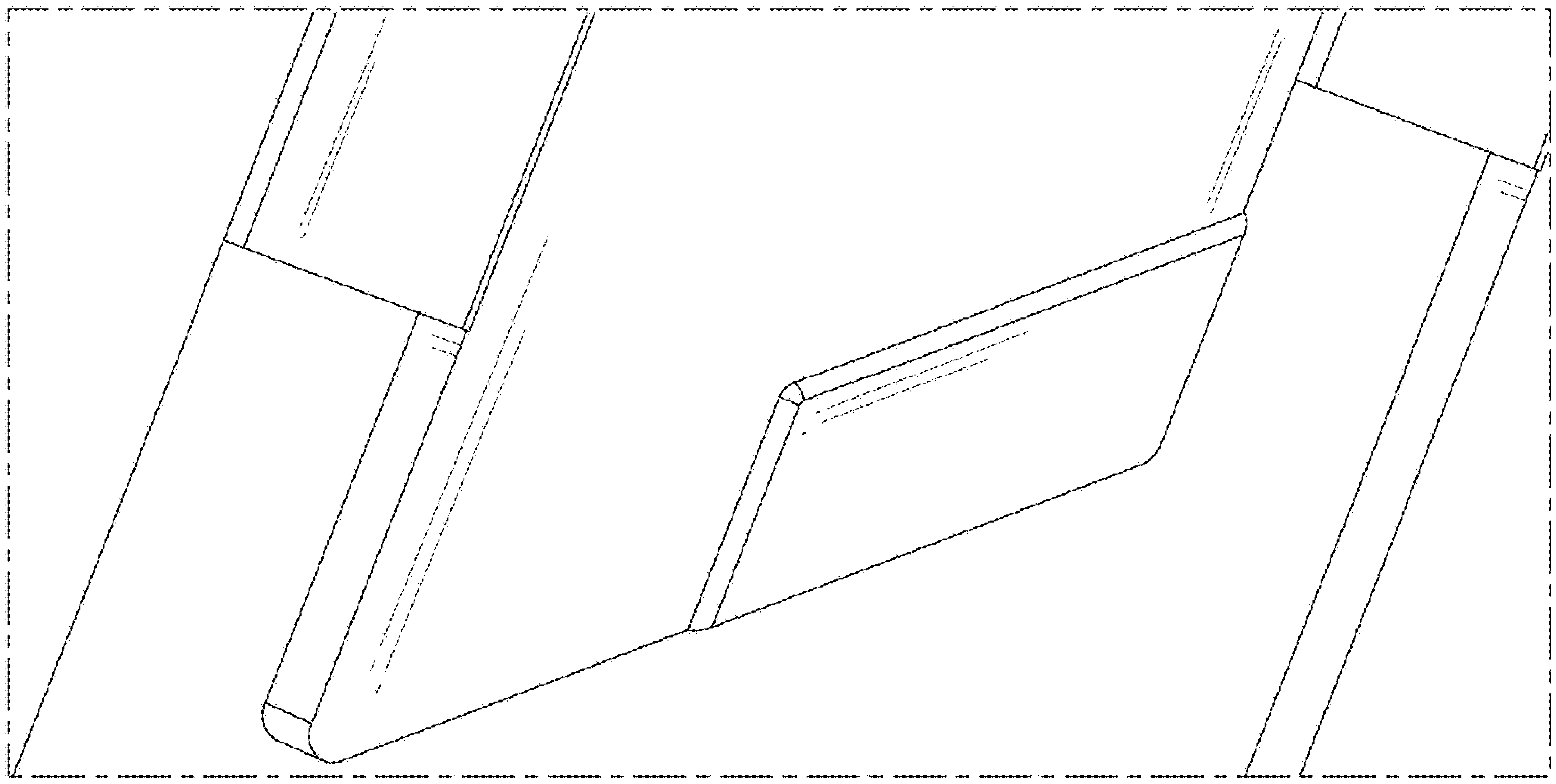


FIG.10

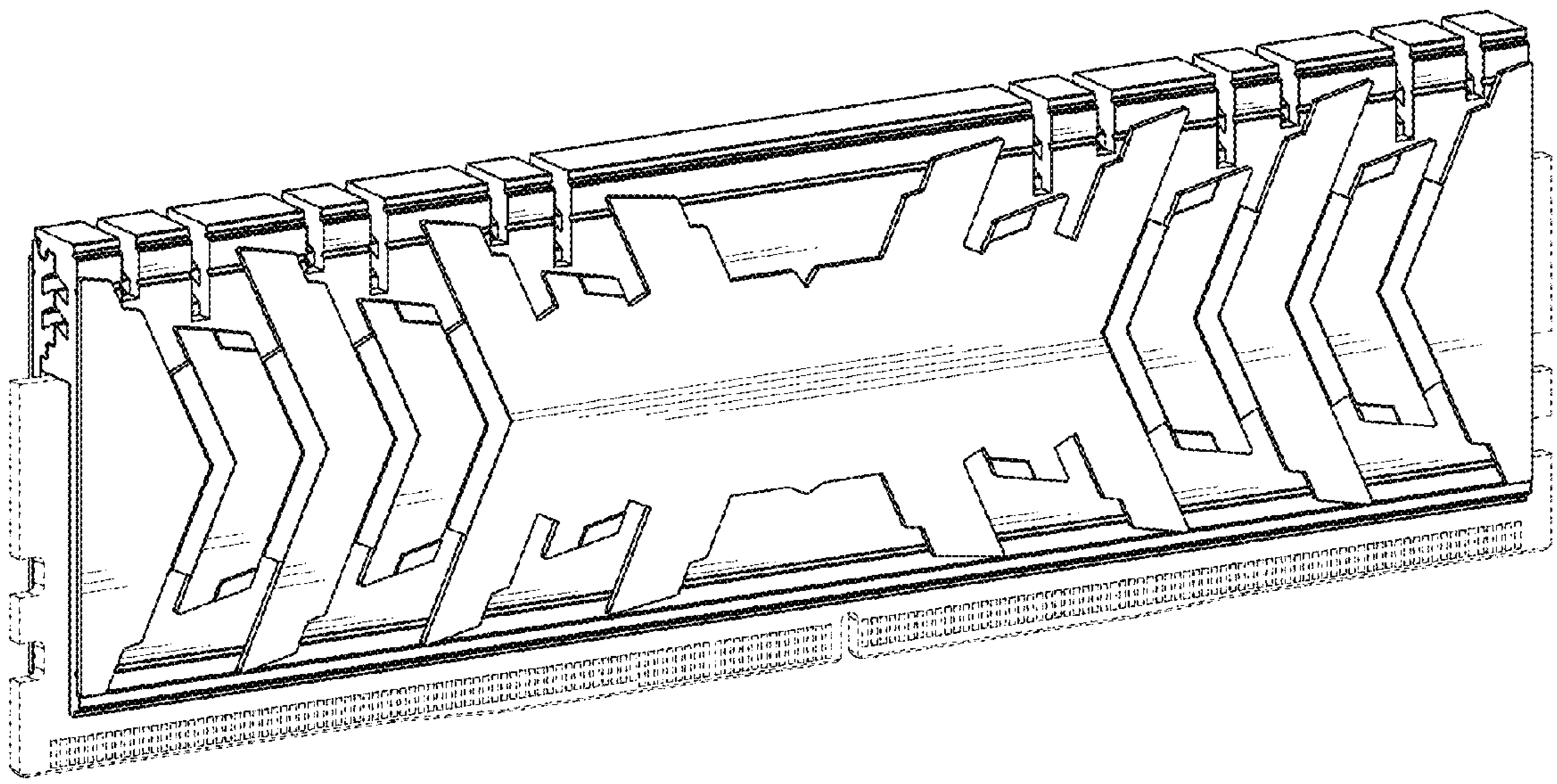


FIG.11

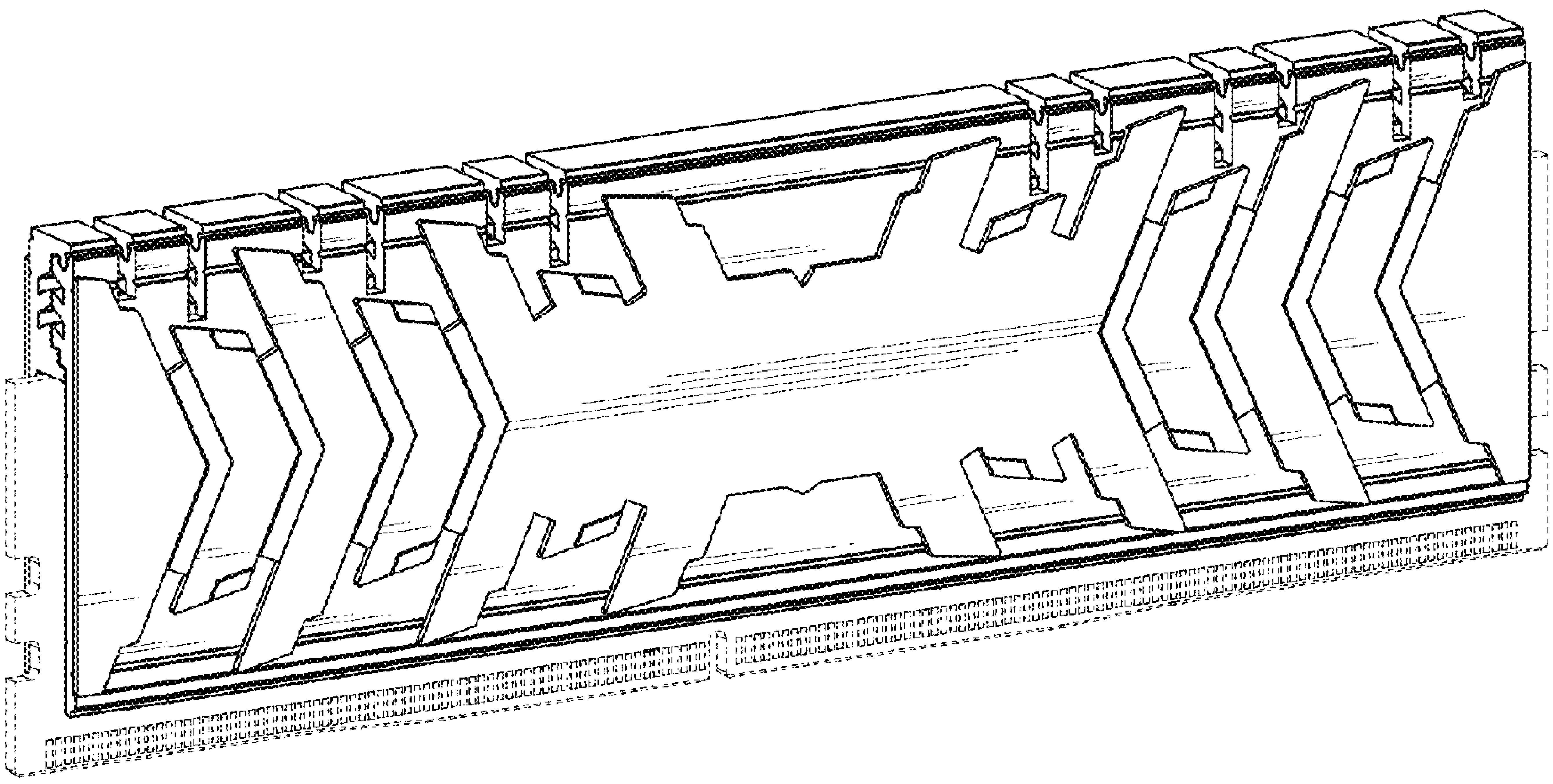


FIG.12